TB INTERVIEWING FOR CONTACT INVESTIGATION: A PRACTICAL RESOURCE FOR THE HEALTHCARE WORKER

Rutgers Global Tuberculosis Institute
NEW JERSEY MEDICAL SCHOOL
Material adapted from the Centers for Disease Control and Prevention’s *Effective TB Interviewing for Contact Investigation* materials.
The TB interview plays an integral role in the extensive process of contact investigation. This involves a careful and methodical approach and strong communication skills.

The *Tuberculosis Interview Outline*, enclosed in this packet, is a tool to assist healthcare workers in conducting a thorough TB interview. The outline contains the five major sections of the TB interview: *pre-interview, introduction, information and education exchange, contact identification, and conclusion*. Each section details the tasks and essential points to be covered during the interview process. The interview outline is based on general TB interviewing procedures. Therefore, it is important to understand and apply local and state health department guidelines in addition to the content of the outline itself.

The *TB Interview Checklist*, included in this packet, highlights the interview outline and is meant to prompt healthcare workers while conducting a TB interview. The checklist should be used after a thorough reading and understanding of the interview outline. The interview checklist can be attached to a notebook or clipboard to assist the healthcare worker in conducting a TB interview.

Use of both the *TB Interview Outline* and the *TB Interview Checklist* will enhance interviewing skills and process. The tools in this packet can be used to both guide individual healthcare workers in the interview process and to supplement ongoing training of staff in contact investigation.
**Tuberculosis Interview Outline**

**Pre-Interview Activities**

Before conducting the interview, the interviewer should organize and prepare for the interview by obtaining background information on the index patient. This will assist in forming a preliminary infectious period and developing an interview strategy.

1. Review medical record

   - Review and document information related to the diagnosis (site of disease, symptom history, bacteriologic/radiographic results, treatment, and recent/past known exposure to TB, including skin test or Interferon gamma release assay (IGRA) results).

   - Review and document social history, language/cultural barriers, and other medical conditions.

   - Document previous hospital admissions, history of previous treatment, substance abuse, mental illness, and/or inability/unwillingness to communicate with other healthcare staff, who may have interacted with the patient.

   - Assess the need for respiratory protection during the interview for both the interviewer and patient.

   - Obtain and document index patient’s locating information.
     - Record name, address, telephone number, and additional locating information
     - Collect and record next of kin, emergency contact, employer, etc.

---

If record is unavailable, consult appropriate source such as provider, infection control practitioner, discharge planner, etc.
2. Establish a preliminary infectious period based on medical record review and local health department guidelines. This will be refined during the interview based on the patient’s verification of information.

3. Develop a strategy for the interview process by analyzing information collected thus far. This includes looking for any unusual factors about the patient, which will need to be considered. This may entail any other medical conditions, mental status, or housing and/or money concerns.

4. If possible, arrange an interview place and time that is convenient to the patient, yet satisfies the health department time frame for the completion of interviews.

5. Arrange and assure privacy by seeking an interview time and place with minimal distractions and interruptions. Note: When a patient is hospitalized, the initial interview should take place in the hospital.

**Introduction**

The very first interaction with the index patient can influence the remainder of the interview. It is important from the beginning for the interviewer to provide an explanation of who he/she is and present a clear picture of the importance of the TB interview.

1. Begin building trust and rapport. Introduce yourself and provide a business card or identification. If appropriate, shake the patient’s hand. Greet the patient using Mr./Ms. and family name and then ask the patient what he/she would prefer to be called. Explain your role in the tuberculosis control program.
2. Emphasize confidentiality, yet inform the patient that relevant information may need to be shared on a need-to-know basis with other health department staff or other people who may assist in congregate settings to most efficiently ascertain which contacts need to be evaluated.

3. Explain the purposes of the interview:
   - To provide TB information and answer any patient questions.
   - To identify people who may have been exposed so that they can be referred for medical evaluation.

**Information and Education Exchange**

As the interview progresses, the interviewer should provide education to the patient on TB and the contact investigation process. As this occurs, the interviewer should continuously assess whether the patient understands the information being exchanged and appears engaged in the interview process.

1. Throughout the interview, determine the extent of trust and rapport developed, while observing the patient and assessing responses.

2. Observe the patient’s body language and speech for comfort level and comprehension of information provided.
   - Make note of any physical signs and/or behavior indicative of alcohol/substance abuse, nutritional status, lifestyle, and other illnesses, which may influence the patient’s level of cooperation.
   - Assess the patient’s communication skills, attitudes, concerns, and needs. As necessary, modify the interview strategy. This may include accomplishing less during the initial interview session and scheduling a follow-up interview.
3. Personal information – Explain the importance of obtaining/confirming the index patient’s personal information. The following information should be collected and/or verified:

- Full name
- Alias(es)/nickname(s)
- Date of birth
- Place of birth (city, state/province, country)
- If born in a foreign country, date arrived in USA
- Physical description (height, weight, race, other identifying characteristics)
- Current address and/or post office (PO) box or place of residence, including directions, if necessary
- Telephone number
- Length of stay at current address
- Marital status
- Next of kin (name, address, telephone number, other locating information)
- Emergency contact (name, address, telephone number, other locating information)
- Employer/school (name, address, telephone number, other locating information)

4. Medical information/problem indicators

- Explain the importance of collecting accurate medical information

---

2This information may vary by individual health department requirements.
• Obtain/document the following patient information:
  — Known exposure to TB (who, where, when) or persons with TB-related symptoms
  — Recent hospitalization(s) (name, admission and discharge date[s])
  — Other medical conditions, including HIV test results, if available
  — Substance abuse (type, frequency, for how long)
  — Medical provider for TB (private or health department, name, address, telephone)
  — DOT plan (where, when, by whom)
  — Barriers to adherence
  — Transportation availability to/from medical provider

• Disease comprehension
  — Use open-ended questions to determine the patient’s TB knowledge
  — Reinforce the patient’s TB knowledge and correct any misconceptions. Explain mode of transmission and how TB affects the body, using language the patient can understand. Avoid using medical terms, unless immediately explained and recognize when to defer questions to appropriate personnel. Provide culturally and language-appropriate patient education materials

• Symptom history – Review with the patient the following TB-related symptoms, including onset dates and duration:
  — Cough
  — Hemoptyisis (coughing up blood)
— Hoarseness/laryngitis
— Unexplained weight loss
— Night sweats
— Chest pain
— Loss of appetite
— Fever
— Chills
— Fatigue

Mentioning prominent dates and major holidays can help the patient’s memory. However, recall of symptom onset can generally be poor. Cough, if present, is the most critical symptom and should be the one symptom on which the infectious period is the most relied.

• Discuss the elements of patient’s current diagnosis, including:
  — Tuberculin skin test or IGRA results
  — Site of disease
  — Symptom history
  — Radiographic/bacteriologic results

5. Disease intervention behaviors – Explain the importance of the following interventions:

• Treatment regimen
  — Explain that the patient’s medications kill TB germs when taken as prescribed. Reinforce the personal and public health benefits of taking the medicine
— If interviewer is trained to do so, identify and explain each prescribed drug and discuss potential side effects

— Establish a specific schedule or reinforce existing schedule for outpatient treatment/DOT

— Review the local/state regulations mandating treatment adherence (if applicable)

• Infection control measures

— If infectious, review with the patient the importance of using a mask and/or a tissue to cover the mouth and nose if coughing and sneezing. Explain proper disposal technique. Emphasize that covering the mouth and nose is an important measure that the patient can take to protect others.

— Discuss the importance of adequate ventilation to protect others

— Describe other measures as appropriate, i.e., home isolation, visitors to the home, return to work/school, etc.

• Maintaining medical care – Discuss the importance of:

— Adherence to therapy while re-emphasizing the significance of continuity of therapy

— Sputum collection, chest X-rays, and physician evaluations

— Adherence to all medical appointments and DOT

— Adherence-enhancing strategies, e.g., available incentives, pill boxes, reminder notes, etc.

6. Infectious period

• Based on the information collected thus far, refine previously established infectious period, if appropriate.

• Review significance of infectious period with patient and discuss its role in contact identification.
Contact Identification

While a brief explanation of contact investigation is provided at the beginning of the interview, a re-emphasis prior to the elicitation of contacts is necessary. This reassures the patient of the importance of providing contacts’ names. It is also important at this time to reinforce the role confidentiality plays and educate the patient about TB transmission.

1. Introduce the contact identification process by reviewing the patient’s understanding of TB transmission. Stress the importance and urgency of the rapid and accurate identification of all high and low priority contacts during the infectious period.

2. Explain how TB is transmitted. Emphasize that the likelihood of transmission increases with duration, frequency, and closed spaces. These concepts should be explored with each named contact.

3. Inform the patient that a congregate setting investigation may be conducted in any setting in which he/she reveals having spent prolonged time during the infectious period. He/she should be made aware that an appropriate site manager (e.g., supervisor, school principal, etc.) may be called in to assist with the identification of contacts, but that an emphasis on confidentiality will be maintained. The patient should know that if he/she chooses to tell others (e.g., classmates, coworkers) about his/her illness or if others already know about the diagnosis, the health department will continue to maintain confidentiality and not reveal or confirm any index patient information.
4. Collect information about the patient’s contacts in the household/residence, social/recreational environments, workplace/school, and other congregate settings. If the patient’s responses contain conflicts in information, ask about these inconsistencies in a non-confrontational manner. Patients are being asked to recall detailed information over an extended period of time and may not remember items very clearly. Some patients, however, may intentionally provide vague or inconsistent information. In this case, the interviewer should re-emphasize the importance of accurate contact identification and stress confidentiality.

**Contact tracing information** – Obtain the following information within the index patient’s infectious period (some information will require a field visit for confirmation):

- Type of housing (e.g., house, apartment, shelter, nursing home, etc.)

- Description of housing including size of rooms, ceiling height, number of rooms, method of ventilation, source of heating/cooling, etc.

- Additional locating information

- If employed: employer name, address, telephone number, full or part-time, hours per day/week, how long employed, transportation type to/from work and length of commute, occupation/type of work, indoor or outdoor work space, and enclosed or open work space

- If unemployed, source of income

- If attended school: name of school, address, telephone number, grade/year, hours per day/week, transportation type to/from school, and length of commute
• Social/recreational activities (e.g., hangouts, bars, team sports, community centers, bands, choir, places of worship, etc.) including hours per day/week, and means of transportation

• Other congregate settings (e.g., armed services, hospital, nursing home, drug treatment center, detoxification center, shelter, group-living home, hotel, prison/jail, etc.), including name and dates of attendance

• Travel history including to where, dates of travel, mode of transportation, and whom patient visited

Identifying Contacts

Contacts’ information should include locating and physical identifying details. Explain to the patient the reason for collecting detailed information on each contact is to be able to locate these individuals as easily and quickly as possible and not to mistake them for others.

The patient may not be able to provide full names or any names for some contacts, so the investigator who must locate the contacts in the field may need to rely on nicknames and/or physical descriptions. Note that the patient may not be able to supply all of the details listed below and that the interviewer should decide how much information is needed based on what is already collected. Ask for information about contacts in the following environments:

• Household/residential

• Social/recreational

• Workplace/school
Obtain the following information within the patient’s infectious period. Collect appropriate locating information about all identified high and low priority contacts, such as:

- Name/alias(es)/nickname(s)  
- Race
- Relationship to patient  
- Physical description
- Address  
- Employer/school
- Telephone number  
- Other locating information
- Age  
- Hours of exposure per week and date(s) of first and last exposure
- Sex

Remember, to ask about social/recreational contacts such as:

- Close friends
- Sexual partners
- Overnight guests and regular visitors to index patient’s residence (e.g., neighbors, friends, relatives)
- Persons with whom drugs are used
- Overnight visits to any other location(s) (obtain address(es))

- Congregate setting assessment
  
  - Ask about description of identified congregate settings including size of rooms, ceiling height, number of rooms, method of ventilation, source of heating/cooling, etc.
  
  - Inform the patient that it will be necessary for site visits to be made to the home, workplace/school, leisure establishments, etc., to assess the shared air environment to accurately structure the contact investigation.
— Stress patient confidentiality as well as the necessity to share information on a need-to-know basis with appropriate site (e.g., school, work) management. Discuss the importance of a medical evaluation for each contact.

• Methods of referral

— Inform the index patient that contacts’ medical evaluations should be carried out immediately.

— Determine the patient’s capability to participate in contact referrals, if this is an option for the patient.

— Contact referral options (options may vary by state): Patient should be given a choice of whether he/she wants to inform his/her contacts of their being at risk of exposure prior to the health department referral process. Discuss the referral options with the patient, deciding which contacts are appropriate for health department referral and for patient referral. Review with patient how and when contact referrals will be made and where the contacts will be referred.

Health department referral: While protecting the patient’s right to privacy, the healthcare worker assumes full responsibility for informing the contact about exposure and the need for a medical evaluation.

Index patient referral: Patient agrees to inform the contact about exposure and the importance of speaking with the healthcare worker regarding the need for a medical evaluation. Remind patient that this method will not protect his/her confidentiality. If necessary, rehearse with patient how he/she may inform contacts and what instructions they should be given regarding their medical evaluations. Inform the patient that the health department will follow up with anyone who does not respond within an agreed upon time frame.
Discuss re-interview time frame:

Explain that you will be visiting the patient again upon discharge from hospital or within 10-14 days (if the initial interview is conducted at the patient’s home) to obtain further information and answer additional questions.
CONCLUSION

Conclude the interview in a positive manner. Recognize the index patient’s participation in the interview, and make the patient feel that the interviewer is trustworthy and can be consulted with concerns as they arise, even if after the interview.

1. Request and answer the patient’s questions.
2. Review and reinforce all components of the treatment plan.
3. Evaluate the patient’s remaining needs or potential adherence problems.
4. Restate the date of the next medical appointment, if known.
5. Arrange for both a re-interview and home visit, if not already completed.
6. Reinforce the procedures for referral of each contact.
7. Provide information on how the patient can contact you.
8. If appropriate, shake the patient’s hand, express thanks and appreciation, and close the interview.